The next experiment consisted in an attempt to test the power of the Portland cement by pulling asunder two cemented blocks of best Portland stone, each 2 feet long by 9 inches broad in superficies between which the cement had been set for twenty-eight days, the whole being slung on a bearing 3 feet 6 inches across between two pairs of dogs or nippers, with a weight scale below, in an elevation of 11 feet in height; but the stone scaled and broke under a weight of 38 cwt., the lower stone leaving the cement nearly entire with a stony scaling over its surface above.

The test of the hydraulic press was then applied vertically to a series of blocks of about 18 inches in length by 9½ inches and 9 inches in breadth and thickness, but the base of each block only could be said to be pressed fairly by a surface flush or level with its own, the press being defective in the like appliance above, so that the blocks were more split as by a wedge than fairly crushed. Several containing large proportions of sand gave way under small pressure, not yet indicated by the proper attachment of weights.

1. Four sand, one cement: began to scale under a pressure of 25 tons, but cylinder leaky. Under 36 tons, applied after stoppage of leak, still scaling, and with 40½ tons: split up and down into three wedged-formed pieces, under a pressure of 45 tons.
2. All cement: scaling slightly under a pressure of 58½ tons when press failed in power.
3. All Roman cement, but not well squared: went under 22½ tons.
4. One cement, five sand: scaling under less than 9 tons, which weight crushed the block.
5. One cement, six sand: split under 13½ tons suddenly applied.
6. One cement, seven sand: weight increased from 18 tons to 25, when block yielded.
7. One cement, three sand: split under a pressure of 14 tons. This block was alleged to have been improperly prepared.
8. One cement, one sand: withstood the highest power appliable in the state of the press, namely, 45 tons.

A small piece of pure cement, 1½-inch surface by 1 inch, six months old, and laid on its inch surface, withstood pressure till partially crushed under 18 tons.

A similar piece of Portland stone was said to have been crushed under a pressure of 23 cwt.

The hydraulic press in use on this occasion not being powerful enough to test the strength of the pure cement and its slighter mixtures with sand, the meeting was adjourned till 26th inst., when a short series of experiments, as certified to us by various gentlemen (not being ourselves present), was made on the premises of Messrs. Robinson and Sons (late Bramah's), engineers, Pimlico, when—

1. One of the previous blocks, all cement, and then thirty-five days old, bore a pressure of 68 tons, when it cracked at one angle, but ultimately bore 90 tons without any alteration.
2. An exactly similar block bore 111 tons without even a crack, and stood under that pressure for nearly one minute, when it broke.
3. Another of the same bore 104 tons.
4. One composed of 9 sand and 1 cement bore 4½ tons.
5. One of equal quantities of sand and cement, previously submitted to a pressure of 47 tons, now cracked at that pressure, but ultimately bore a pressure of 108 tons before it broke down, the form of the crack not altering.

The New Park at Battersea.—The new park at Battersea, which has been for some time in abeyance, will be commenced without delay, notices having been conveyed on Saturday to all the residents on the spot, that they must quit possession, the intention being at once to remove the houses. The waterworks will remain. The park will extend the whole distance between Battersea-bridge and Nine Elms, and from the bank of the river to the public road across Battersea Fields, making the length of the park about 2½ miles, and its width a little more than a mile. A carriage-drive 40 feet in breadth will be formed along the bank of the Thames, and a suspension bridge will be thrown across the river to the spot where the Red House now stands. Towards the construction of this bridge the Marquis of Westminster has contributed the sum of 60,000*l*. At the south-western boundary of the park an elegant church has been erected, and will be ready for consecration in the course of the present autumn.—*Daily News*.

IMPROVEMENT AND DECORATION OF THE ADELPHI THEATRE.

It gave us pleasure to hear that the spirited lessee of the Adelphi Theatre, in the Strand, desiring to decorate the interior of it, had sought the assistance of an architect, Mr. Digby Wyatt; and we are even better pleased to find that the architect has succeeded well, and has produced a very original and pleasing whole.

In designing the decorations of the audience portion of the theatre, Mr. Wyatt's imagination has evidently been influenced by his recollection of those quaint old engravings of the birth-day fêtes of Louis XIV., in which the *bosquets*, set gardens, and other ornamental portions of the *Parterres* of Fontainebleau and Versailles are represented as having been converted, by the addition of trellis, flowers, ribbands, and hastily executed paintings, into temporary *Salles de Spectacle*, or *Salons de danse*. Several of Molière's charming little ballets were composed expressly to be acted on the occasion of these galas, and it was customary both before and after their performance for the noble audience to promenade in Arcadian costume, *en grande tenue*, or disguised in the motley garb of Arlequino, Mascarillo, Scaramuccia, Brigitta, and the other characters of the then fashionable Italian pantomime. The paintings of Watteau, Lancret, Boucher, and many other artists of those good old days of artificial rusticity, commemorate such scenes, and furnish sufficient authority to enable us to identify the source of Mr. Wyatt's inspirations on this occasion.

He has endeavoured to make the drop scene (which has been fairly painted by Messrs. Pitt and Johnstone) accord with the character of the rest of the decoration. As the audience portion of the house carries out the idea of the temporary theatre, so are we led by this picture on to the very scene, in the green *plats* and *allées vertes* of which these courtly revels were wont to be enacted.

The execution of the work was entrusted to Mr. Sang, and has been successfully carried out. There is a slight want of unity in parts, a heaviness of tone in the front of the main tier of private boxes, for example, as compared with the continuation round the dress circle, which we ascribe rather to the executant than to the designer, but we will not let this qualify our warm praise to both.

Considerable improvements have been made under the direction of Mr. C. Manby, in the approaches, ventilation, &c., and by enlarging the stage.

AWARDS OF OFFICIAL REFEREES.

ALTERATION OF SHOPS TO PRIVATE HOUSES.

In an information laid by the surveyor of the district of Greenwich against Mr. Rogers, of Broad-street, City, builder, it was alleged that the said Samuel Rogers was then making certain alterations to the fronts of four houses, by taking out the shop fronts and converting the said four houses into private houses, filling in the openings of the shop fronts the whole height of the ground-floor story with nine-inch brickwork, and leaving the breastsummer and two story posts forming the door-frames in each house as they were fixed, nearer than four inches to the external face of the wall, contrary to the rules of the Act. At the hearing the district surveyor stated that the said houses had been originally built of the fourth rate, but by reason of certain additions made thereto were now of the third rate, in consequence of which the thickness of the external walls ought not to be less than 13 inches in any part; and the builder, Rogers, contended that it was not contrary to the said Act to fill in the opening left by the removal of the shop front with brickwork 8½ inches thick, as he might stop up any window in a third rate house with brickwork of the last-mentioned thickness; and with regard to the breastsummers and story posts, that the same had been left with a view to the subsequent re-insertion of shop fronts if required; and further, that it would endanger the buildings to remove the same, in which opinion the district surveyor concurred; and it further appeared that no evasion of the said first-mentioned Act had been intended, the houses being more expensive with the above-mentioned alterations than they would have been if originally built as required by the district surveyor.

At the hearing it was stated that doubt had arisen between the parties as to whether, in altering the shops into private rooms, it would be contrary to the rule of schedule F. of the Act, to insert the flues from the new fireplaces into the flues of the fireplaces of the story above, and they requested the award of the said official referees thereon.

The referees determined—"First, that inasmuch as in altering the said four houses the front external walls thereof in the ground-floor story have been built of less thickness than is by schedule C. of the first-mentioned Act required for buildings of the third rate of the first class, to which rate and class the said houses belong, and inasmuch as the said breastsummers and story posts which were necessary for the shop front now removed have been left in the said walls, so as to form part of the component materials thereof, and as frames to the doors are not fixed at the distance of 4 inches, at the least, from the external face of the said walls, the said four houses are contrary to schedule D., part 2, of the said first-mentioned Act: but forasmuch as it appears that no evasion of the said Act has been intended, the houses as altered having cost more than they would have cost if originally built as they now are, and as we believe that no useful purpose would be answered by the removal of the breastsummers and story posts, and the filling in with brickwork more than 9 inches thick, we do not give any direction in respect thereof.

Secondly, that if the flues from the fireplaces of the rooms above the said shops have been built and are in every respect in conformity with the rules of schedule F. of the said first-mentioned Act, it will not be contrary to such rules to insert therein the flues from the fireplaces proposed to be formed in converting the said shops into private rooms."

IMPORTANT TO LANDLORDS.

M'EWAN v. NEWIN.

This was an action brought in the Islington County Court on Tuesday, before Mr. Serjeant Jones, the deputy judge, to recover the sum of 5*l*. for one quarter's rent, and of 11*l*. 14*s*. 10*d*. for repairs of a house situate No. 28, Grove, Holloway. It was alleged that the defendant, who is a laundress, left the premises in a very dilapidated state; the paper being stripped off the walls, the panels of the doors split in several places, the sash-lines broken, the staircase plastered with candle grease and burnt, and other parts of the building injured to such an extent as to leave no doubt that the destruction was the result of wilful damage. Mr. Austin appeared as solicitor for the plaintiff, and Mr. Wakeling for the defendant. The plaintiff stated that in 1846 the house, which was then in the occupation of the defendant, was put in thorough repair; and tradesmen were called, who deposed to the dilapidated state the premises were in after the defendant had quitted them. Mr. Wakeling submitted that the plaintiff was not entitled to recover for repairs, on the ground that there was no covenant in the agreement that the defendant should repair or beautify the premises; and that before he could recover for dilapidations, he must produce the best evidence that the damage was wilful. The plaintiff had merely proved the general repairs; and although from the nature of the defendant's business the paper might have become loose from the effects of the steam, or accidentally stripped off the walls by a child, it could not be said that that was wilful damage; and with respect to other dilapidations, he should be able to shew that they were not to so serious an extent as had been complained of, and were nothing more than the ordinary fair wear and tear of premises that had been occupied for a period of two years by any person carrying on the business of a laundress. In reference to the payment of the quarter's rent, he (Mr. Wakeling) submitted that the plaintiff had waived all claim. The defendant had given him notice to quit at Lady-day; she left the premises, however, on the 17th of March, delivering the key to a Mrs. Butler, who was formerly one of her (defendant's) lodgers, and who, to accommodate the landlord, had removed with the other lodgers to allow the

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